

Mr. Brian Graf  
Essroc Cement Corp.  
Highway 31  
Speed, Indiana 47172

Re: Significant Source Modification  
019-11171-00008

Dear Mr. Graf:

Essroc Cement Corporation (Essroc) applied for a Part 70 operating permit on June 3, 1996 for a cement plant operation. Pursuant to 326 IAC 2-7-10.5, the following significant source modification has been made in response to a request for an Adjudicatory Hearing submitted by Essroc on November 24, 1998 and a letter submitted by Essroc on July 22, 1999 regarding CP-019-9349. The request for Adjudicatory Hearing petitions the removal of a specific test method stated in Operation Conditions C.12(c), D.1.4(a), and D.1.7(a). The letter requests an enforceable production limit on the roller press system to demonstrate the Prevention of Significant Deterioration (PSD) rules do not apply. In addition to these requests, the Office of Air Management (OAM) has added a condition that requires the existing roller crusher system be permanently removed from service upon operation of the proposed roller press system to demonstrate the PSD rules do not apply. The strikeout characters represent deletions and the boldface characters represent additions to the original conditions of CP-019-9349:

A.2 Emission Units and Pollution Control Equipment Summary

This construction permit is for a roller press system for the existing 2D Finish Grinding System. This roller press system replaces the roller crusher system, has a maximum cement production of 120 tons per hour, and consists of the following emission points:

- (a) **one (1) scale system (ID# 45) consisting of** three (3) belt conveyors ~~(ID# 39, 49, and 53)~~ **and one (1) bucket elevator; and**
- (b) ~~one (1) bucket elevator (ID# 41);~~ **one (1) roller press system (ID# 46) equipped with one (1) existing conveyor.**
- (c) ~~one (1) roller press (ID# 45); and~~
- (d) ~~modification of existing conveyor (ID# 9).~~

~~Emission units 39, 49, 53, 41, and 45 are~~ **The scale system (ID# 45) is** attached to a baghouse 261 ~~and that~~ exhausts through a stack (ID# 93). ~~Emission unit 9~~ **The roller press system (ID# 46) is** attached to baghouse 262 ~~and that~~ exhausts through a stack (ID# 94) ~~and baghouse 263 that exhausts through a stack (ID# 95).~~

#### C.12 Monitoring Data Availability

- (a) With the exception of performance tests conducted in accordance with Section C - Performance Testing, all observations, sampling, maintenance procedures, and recordkeeping, required as a condition of this permit shall be performed at all times the air pollution emitting equipment listed in section D.1 of this permit is operating.
- (b) As an alternative to the observations, sampling, maintenance procedures, and recordkeeping of subsection (a) above, when the air pollution emitting equipment is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and recordkeeping that would otherwise be required by this permit.
- (c) If the air pollution emitting equipment is operating but the associated air pollution control equipment monitoring parameter is outside the required range specified in the approved site-specific Preventive Maintenance Plan or visible emissions are observed at the stack exhausts, ~~as determined via 40 CFR Part 60, Appendix A, Method 22;~~ and if these conditions are not caused by a malfunction as defined in 326 IAC 1-2-39, additional observations and sampling should be taken with a record made of the nature of the condition. An excursion from a monitoring parameter does not constitute a violation of this permit, but failure to take corrective actions is considered a violation.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or recordkeeping, reasons for this must be recorded. Failure to make the required observations, sampling, maintenance procedures, or recordkeeping is a violation of this permit.

#### SECTION D.1

#### FACILITY CONDITIONS

Roller Press System with a maximum cement production of 120 tons per hour and consisting of the following emission units:

- (a) **one (1) scale system (ID# 45) consisting of** three (3) belt conveyors (~~ID# 39, 49, and 53~~) **and one (1) bucket elevator; and**
- (b) ~~one (1) bucket elevator (ID# 41);~~ **one (1) roller press system (ID# 46) equipped with one (1) existing conveyor.**
- (c) ~~one (1) roller press (ID# 45); and~~
- (d) ~~modification of existing conveyor (ID# 9).~~

~~Emission units 39, 49, 53, 41, and 45 are~~ **The scale system (ID# 45) is attached to a baghouse 261 and that exhausts through a stack (ID# 93). Emission unit 9** **The roller press system (ID# 46) is attached to baghouse 262 and that exhausts through a stack (ID# 94) and baghouse 263 that exhausts through a stack (ID# 95).**

#### **D.1.2a Production Limitation**

**The cement production rate of the roller press system shall not exceed 830,885 tons per year, rolled on a monthly basis, to demonstrate that 326 IAC 2-2 (PSD) does not apply. This shall demonstrate compliance with the emission limits established in D.1.1 and D.1.2.**

#### **D.1.2b Operation Limitation**

**The existing roller crusher system of the grinding operation shall be permanently removed from service upon operation of the roller press system to demonstrate that 326 IAC 2-2 (PSD) does not apply.**

#### **D.1.4 Visible Emission Determinations**

- (a) Presence of visible emissions shall be determined at ~~the~~ **each** baghouse stack **once daily** during normal daylight operations. A trained employee observer shall **record whether visible emissions are observed, excluding startup or shutdown time.** ~~determine whether visible emissions are present or not using 40 CFR Part 60, Appendix A, Method 22 (copy enclosed).~~
- (b) A trained observer is someone who **has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of visible emissions.** ~~is trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor). This training shall be obtained from written materials found in Citations 1 and 2 of Bibliography or from the lecture portion of the Method 9 certification course.~~
- (c) The Preventive Maintenance Plan for this unit shall contain response steps for when visible emissions are observed.

#### **D.1.5 Baghouse Operating Parameters**

~~That~~ Baghouses 261, **263**, and 262 shall be operated at all times when the **scale system or** roller press system is in operation.

- (a) The Permittee shall take readings of the total static pressure drop across ~~each of the two (2) baghouses,~~ at least once per working shift when the ~~Rotary Press System~~ roller press system is in operation. The pressure drop across each baghouse shall be maintained within the range set forth in the approved site-specific Preventive Maintenance Plan. The Preventive Maintenance Plan for the baghouses shall contain troubleshooting contingency and corrective actions for the baghouses when the pressure reading is outside of the range specified in the approved site-specific Preventive Maintenance Plan for any one reading.
- (b) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications of this permit and shall be calibrated every six (6) months.

- (c) The gauge employed to take the pressure drop across the baghouses or any part of the facility shall meet the specifications contained in the approved site-specific Preventive Maintenance Plan.

#### D.1.7 Record Keeping Requirements

- (a) The Permittee shall maintain records of daily visible emission observations of the **scale system and** roller press system stack exhausts. ~~using the data sheet as provided under U.S. EPA Method 22.~~
- (b) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain the following:
  - (1) Weekly records of the following operational parameters during normal operation:
    - (A) Differential pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented when the baghouses operate outside of the pressure drop range specified in the approved site-specific Preventive Maintenance Plan and when visible emissions are observed.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Standard operating procedures for the equipment, manufacturer's specifications or their equivalent, and quality assurance/quality control (QA/QC) procedures which may be included in the preventive maintenance plan, shall also be maintained.
- (c) **To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain cement production records from the roller press system as required by Condition D.1.2a. Production records shall be kept for a minimum period of 5 years and shall be made available within 1 hour upon verbal request of an IDEM, OAM representative.**
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.8 Reporting Requirements

- (a) **The Permittee shall submit the following information on a quarterly basis:**
  - (1) **records of cement production from the roller press system to demonstrate compliance with Operation Conditions and D.1.1 and D.1.2.**

All other conditions of CP-019-9349 shall remain unchanged and in effect. Please attach a copy of this significant source modification, which is effective upon issuance, with the original construction permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Michele Williams at (800) 451-6027, extension 3-0863 or (317) 233-0863.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

MMW

cc: File - Clark County  
US EPA, Region V  
Air Compliance Section Inspector - Joe Foyst  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

|  | Emissions, tons/yr          |             |                  |                     |                     |                    |                    |                |                           |                                   |
|--|-----------------------------|-------------|------------------|---------------------|---------------------|--------------------|--------------------|----------------|---------------------------|-----------------------------------|
| Pollutant  | 1997 Actual                 | 1998 Actual | 1997-98 Baseline | Projected Emissions | Potential Emissions | Projected Increase | Potential Increase | PSD De Minimis | Emissions @ PSD Threshold | Average Emis Factor, lb/T Clinker |
| TSP  | 234                         | 237         | 236              | 252                 | 318                 | 16.8               | 82.4               | 25             | 261                       | 0.60                              |
| PM <sub>10</sub>   | 192                         | 193         | 193              | 206                 | 259                 | 12.7               | 66.7               | 15             | 207                       | 0.48                              |
|  | 2D Mill Production, tons/yr |             |                  |                     |                     |                    |                    |                |                           |                                   |
| Clinker  | 475,264                     | 505,023     | 490,144          | 789,341             | 861,984             | 299,197            | 371,840            | --             | --                        | --                                |
| Cement   | 577,180                     | 614,787     | 595,984          | 830,885             | 1,051,200           | 234,902            | 455,217            | --             | --                        | --                                |
| NOTE: This summary does not include contemporaneous changes. |                             |             |                  |                     |                     |                    |                    |                |                           |                                   |